

SURGERY Two HUNDRED YEARS
AGO

Surgery



200 years
AGO

SURGERY

as as as

TWO HUNDRED
YEARS AGO :::



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ILLUSTRATED FROM
ORIGINAL COPPER PLATES

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INTRODUCTORY.

IN the magnificent development which has attested the latter half of the Nineteenth Century in all branches of science, it becomes a source of interest at all times to review the conditions and methods which have preceded them. Experimentation and observation, skill and mechanical ingenuity have evolved results which are almost beyond the comprehension of the knowledge of fifty years ago.

The science of medicine, perhaps the most conservative amongst the sciences, has slowly accepted the results which chemical and therapeutical research have opened up, but in the magnificent additions, the approved and adopted new forms of medication now in use, and constituting the major part of the armamentarium of the modern physician, it can claim as grand and beneficent achievements as in any of the more pronounced or more renowned discoveries of the sister sciences.

No less salient, too, is the humane and wonderful progress in its allied field—surgery. With the advent of anaesthesia, the field of research became so enlarged that the achievements of the past fifty years will well vie with those which have marked its history since the Christian Era began. Under the beneficent oblivion it secures, what would have been regarded as miracles by the most advanced surgeons of the days before its introduction and use, are now regarded as so commonplace as to be entitled to be considered ordinary operations, fearlessly undertaken and easily accomplished, the technique being understood.

Were Hippocrates, Heister, Greenfield, Franco or Douglass to witness operations which are now common under anaesthesia, they would stand amazed at their comparatively limited conception of the human powers of resistance or endurance.

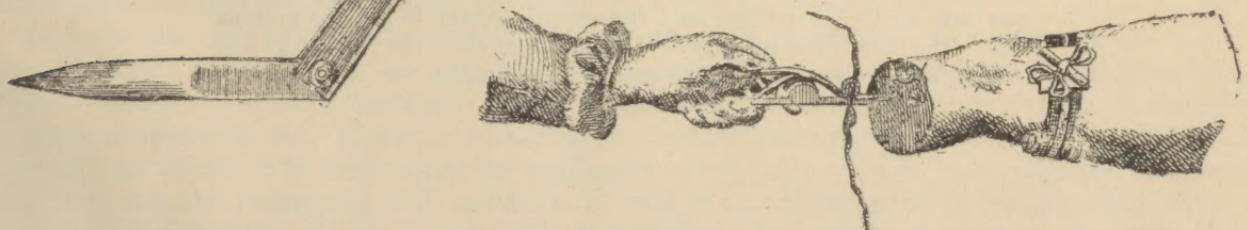
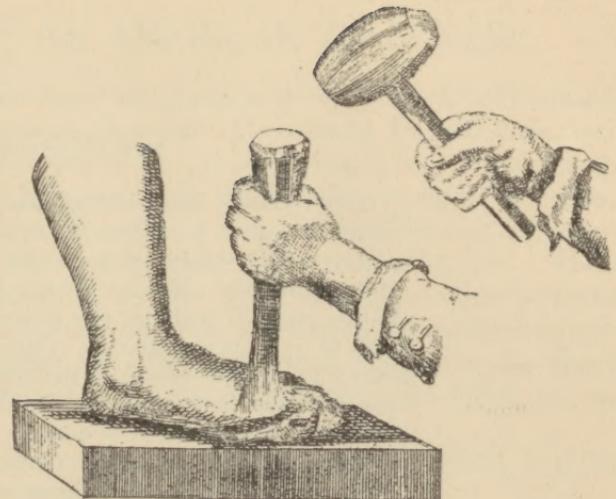
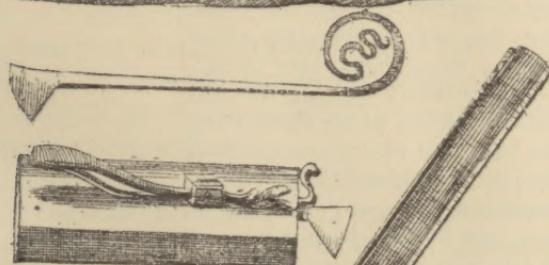
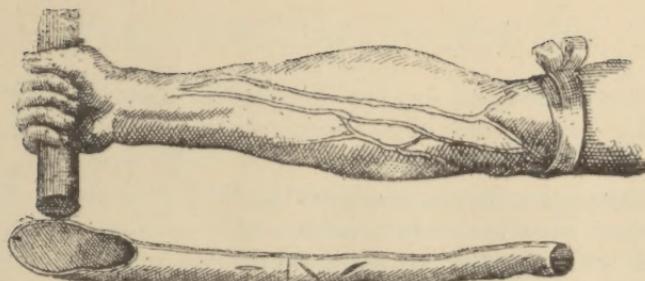
Still it is not to be overlooked that, considering their environment, the crudeness of their appliances, and their imperfect knowledge of anatomy, there were Giants in those days, who pursued their heroic calling with all the bravery, ardor, and self-abnegation which mark their modern confreres. And they were the forerunners, too, even with their primitive instruments and methods, of many of the operations which are the light and glory of modern surgery.

It is rather to the perfection of the instruments used and to the better knowledge of methods of operating, than to new and distinctly original surgery, that our present era may lay claim to pre-eminence.

The surgeons of two hundred years ago employed counter-irritation by scarification and cupping; hemorrhages were controlled by the tourniquet, by ligation, compression, and torsion. The obstetrician was equipped with forceps, the single blade being used, placental forceps, and chairs for use in labor. The gynecologist had his pessaries and tampons, and was as ready to undertake Cæsarean section as the surgeon of to-day. The laparotomist made abdominal sections, the ophthalmologist removed cataracts, the otologist explored the ear, and the orificial surgeon passed catheters, dilated strictures, etc., very much as to-day.

We have reproduced from the original copper plates illustrations of some of the more important operations, with a brief description of procedure employed, upon pages following plates.

PLATE I.



BLOOD-LETTING
INSTRUMENTS.

APPLYING TORSION
AFTER AMPUTATION.

AMPUTATION OF
GREAT TOE.

DESCRIPTION OF PLATE I.

Until recently, blood-letting was considered to be the absolutely necessary initiative for treatment of disease, regardless of the condition of patient. The opening of the vessel was not confined to any particular region of the body, although the usually most accessible part was the arm. In this case a tourniquet or a roller bandage was placed above the elbow joint to produce a dilatation of the vessels, and bring them more prominently to the observation of the operator. An ordinary two-edged lancet was used, the incisions being made at various angles to the axis of the vessels. After a sufficient amount of blood had been drawn according to the judgment of the surgeon, a layer of lint was applied to the part, bandaged, and the tourniquet removed. In amputating a finger or toe, one of the methods was to place the part on a block, and with a sharp chisel and a mallet cut off the member. From two to four ounces of blood were permitted to flow "to prevent inflammatory symptoms arising." A roll of lint was then applied, bandaged, and the stump allowed to heal by granulation. The remaining illustrations of the plate show the method of controlling hemorrhage, after an amputation, by torsion.

THE REMEDIAL PROPERTIES OF AN AMERICAN DISCOVERY.

IN the special field of medical progress, while we have not perhaps to record such brilliant and overwhelming triumphs as in other lines, yet discoveries have been made fraught with such permanent effect upon our methods of practice as to tear down old idols and uproot old methods. It is our purpose to illustrate this general statement by one notable addition to our *materia medica*, which has more than anything else released the practice of medicine from the thrall of the poppy.

Without going into detail, we will state that in this short paper we refer to Antikannia. There is no remedy so useful and attended with such satisfactory results in the treatment of melancholia with vasomotor disturbances, anaemic headaches, emotional distress, and active delusions of apprehension and distrust; and it also increases the appetite and arterial tension, and promotes digestion, as well as being particularly serviceable in relieving the persistent headache which accompanies nervous asthenia.

In neurasthenia, in mild hysteroid affections, in the various neuralgias, particularly ovarian, in the nervous tremor so often seen in confirmed drunkards, it is of peculiar service.

In angina pectoris this drug has a beneficial action; it relieves the pain and distress in many cases, even when amyl nitrite and nitro-glycerine have failed entirely. In pseudo-angina, frequently observed in hysterical women, its action is all that can be desired.

Patients who suffer from irritable or weak heart, needing at times an analgesic, can take it without untoward after-effects, knowing (at least the medical attendant does) that the heart is being fortified. It increases the elimination of urea and purifies the blood without increasing the destructive tissue metamorphosis. The urine is increased in quantity during its administration. It lessens coma and loud delirium by contracting the capillaries of the brain. In delirium tremens, it relieves when there is great restlessness with insomnia, as well as general lowering of the nervous power.

Antikannia is more efficacious and easier to take than the various effervescent preparations in

the shops lauded for hemicerania, migraine, etc., etc. In just such conditions, when the slightest effort is productive of dyspnoea with cardiac palpitation, it is indicated.

The pain of locomotor ataxia yields to treatment with Antikamnia in a remarkable degree, its analgesic power being of a peculiar kind, in that it will relieve painful affections due to pathological conditions of the peripheral nerves, as neuritis, etc.; also lumbago, sciatica, and myalgia.

In chronic catarrh of the stomach, with its often accompanying headaches, in cardiac dropsy, and in ascites, this derivative is of decided benefit.

Antikamnia in the adynamia of typhus and typhoid fevers, as well as pneumonia, is of great value, and in many cases takes the place of alcohol. Its effect is perhaps not entirely on the nervous system, but has the power to diminish the febrile waste of nitrogenous tissues, as shown in the large discharge of urea. As an antiseptic and antipyretic and anti-periodic, Antikamnia is notoriously good, nothing better. It is especially beneficial in spasmodic asthenia, in hay fever, in whooping cough, in headaches, particularly of the nervous variety, also that from disorders of the digestive organs, or from the various neuroses.

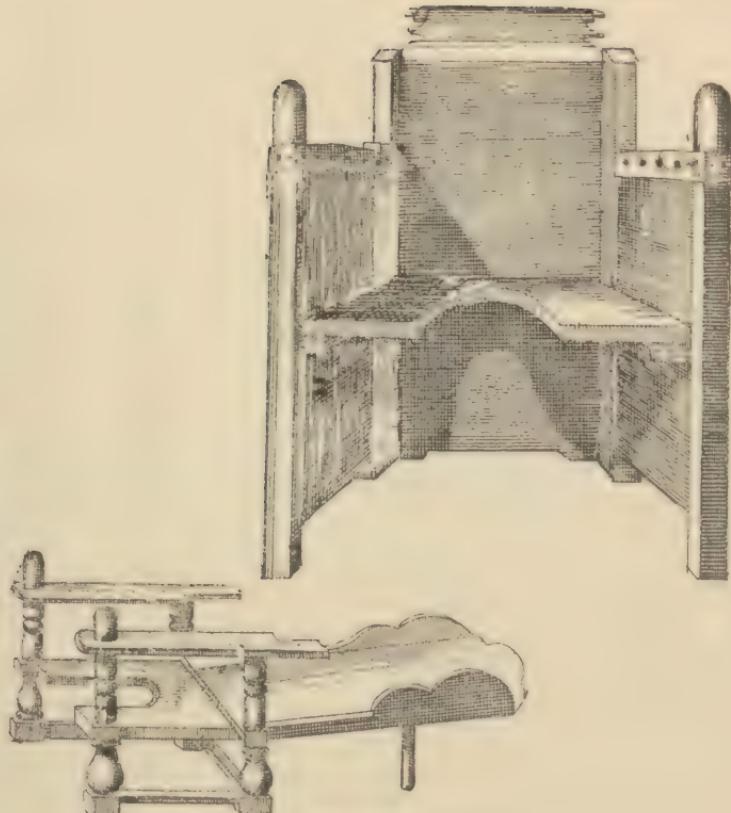
In the treatment of "La Grippe" and its troublesome sequelæ, no other drug has given so much satisfaction. Angina pectoris, following or coming on during an attack of influenza, often alternates with an attack of asthma. Sometimes the angina pectoris is accompanied with a tired feeling in the arms, with pain. This condition is relieved by Antikamnia.

In treating pneumonia, in addition to lowering of the temperature, we want something to act as an analgesic. Antikamnia is both antipyretic and analgesic, and thus reduces the fever, relieves the pain, and quiets the restlessness so often seen. In painful affections of the testicles and joints and in coxalgia, also in relieving the nocturnal pain in the tibia of syphilitic patients, it gives satisfactory results. When pain is the prominent symptom, it is a desideratum, as its province is relief of pain in any and every form. And best of all, there is no danger of morphinism, no nausea or malaise so common with opium.

PLATE II.



POSITION OF CHILD IN LITHOTOMY.



CONFINEMENT CHAIRS.

DESCRIPTION OF PLATE II.

The first illustration on Plate II. shows the position in which the child was held when a lithotomy was to be performed ; the same position was also assumed in castration.

To aid the mother in confinement and to hasten a tedious labor, the two chairs, as shown, were used. In the first one the mother was seated, while the other was placed in the bed and the woman on it. Forceps, both uterine and placental, were also brought into use in these cases.

We might cite many more interesting subjects relative to the surgery of older days, but these will, we are confident, furnish a perspective against which the enlightened, positive, and additionally developed knowledge and skill of the present day will shine out as in full pace with the growth of all the sciences.

FEW DRUGS ARE NECESSARY.

MANY years ago a well-known medical teacher was in the habit of saying that he could practise medicine successfully if he had only three drugs in his case: Opium to control pain; quinine to break fever; and iron to tone up the system.

DISEASE BETTER UNDERSTOOD.—During these early days the cause of disease was little understood. But now we know that many of the ills which the profession is called upon to treat are due, directly or indirectly, to some form of germ life. The fact that we are beginning to understand the cause of disease is an immense step toward the solution of the cure. This also enables us to account for the action of those drugs, the therapeutics of which have been heretofore surrounded in mystery. We can now prescribe certain remedies for certain affections and rest assured that certain results will surely follow.

PAIN—TONIC—GERMS.—It is a fact that nearly all diseases are accompanied with pain; a large number are caused, or aggravated, by the presence of micro-organisms; and all diseases, or departures from health, lower the tone of the system. It follows, therefore, that if these three conditions can be corrected a large class of diseases will be cured thereby. To meet these indications we must have, first, a remedy to relieve pain; second, a safe internal antiseptic, to remove the cause; and third, a tonic to build up the lowered and depleted system. The three drugs having these properties are Antikammia, Quinine, and Salol.

THERAPEUTICS.—Antikammia, as an antidote to pain, is well known and needs no further description. Salol is a drug of the most decided antiseptic properties. It renders the intestinal canal antiseptic and thus removes the first cause of any disorder dependent upon intestinal germs. The practical application of this truth makes Salol of great value in a large number of affections. Quinine is so well known that but little need be said of its therapeutical properties. It is a valuable adjunct to Salol, as it has antiseptic properties of considerable power. It also aids the action

of Antikamnia, as it is a well-known antipyretic. Besides aiding the therapeutical properties of these two drugs, Quinine has marked individual power of its own. Hare says that Quinine is not only a simple bitter, "but also seems to have a direct effect in increasing the number of the red blood corpuscles." A tablet composed of Antikamnia two grains, Quinine sulph. two grains, and Salol one grain, allows of the easy administration of these drugs in proper proportionate doses.

INTESTINAL AFFECTIONS.—The well-known therapeutical properties of these drugs make this tablet indicated in such intestinal affections as Fermentative Dyspepsia, Diarrhoea, Dysentery, Duodenal Catarrh, Cholera Infantum, and Typhoid Fever. The Antikamnia controls the pain as effectually as morphine, and yet is never followed with any of those undesirable effects so characteristic of opium and its derivatives. Freedom from pain saves an immense amount of wear and tear to the system and places it in a much better position for recovery. The Salol acts as an antiseptic and removes from the intestinal canal the first or continuing cause of the affections just mentioned. The Quinine acts as a tonic, increasing the appetite, and thus contributing much to a speedy recovery.

ACUTE ARTICULAR RHEUMATISM.—In acute articular rheumatism this tablet is strongly indicated. The researches of Guttmann showed conclusively that the coal-tar products have great power over this disease. In speaking of the treatment of articular rheumatism, Hare says that "any substance possessing strong antipyretic power must be of value under such circumstances." The lowering of the fever quiets the excited system and removes the delirium which accompanies the hyperpyrexia. Hare notes, in this connection, that the analgesic power of these coal-tar products "must exert a powerful influence for good." When the pain is removed and the nervous wear of sleepless nights and suffering days is controlled, there must be an improvement in the patient's condition. Guttmann suggests that these coal-tar products possess a direct anti-rheumatic influence. The good effects of Salol in this disease are well known, as also are those of Quinine. We believe, therefore, that we have in this tablet a most valuable combination for the treatment of this painful affection.

PLATE III.



TOURNIQUET APPLIED.



AMPUTATION OF LEG.

DESCRIPTION OF PLATE III.

In ligating the larger blood-vessels, to prevent a slipping of the thread, a needle was passed through the walls and the tie made above it. Heavy compresses of linen or lint were put on and bandaged, the whole held in position by a plaster shaped like a Maltese cross. The patient was then put to bed and an assistant left to firmly hold one or both hands over the stump to arrest any hemorrhage that might occur. The tourniquet was gradually loosened a little each day till all hemorrhage had ceased.

The details and after-treatment in an amputation of the leg were very similar to the methods employed in amputation of the forearm. See description of Plate XII. It differed in that flaps were made and sutured in very much the same manner as they are at the present time.

INFLUENZA—LA GRIPPE.—In Influenza, or La Grippe, we have a condition which calls for just the remedies found in this tablet. The Antikamnia relieves the severe pains in the back, limbs and head, and reduces the fever; the Quinine exerts its well-known influence, and has probably been more generally prescribed in this disease than any other drug; while Salol removes all those symptoms which are associated with the condition we call "rheumatism." For the ordinary "cold in the head" these tablets will be found both convenient of administration and prompt in giving relief. An acute coryza can very generally be aborted by a hot foot-bath at bedtime, a gentle laxative, and the judicious use of these tablets.

MALARIA—MENTAL STRAIN.—As a prophylactic against Malaria this tablet is especially useful. It gives most happy results in that violent form of pain known as "brow ague," dependent, as it is, upon a malarial poison. For the condition known as Mental Strain, resulting from excessive mental work, anxiety, etc., these tablets give relief by quieting the nervous system, placing the alimentary tract in a healthful condition, and toning up the general system.

ANÆMIA—CHLOROSIS.—In the condition known as Anæmia, Chlorosis, Mal-nutrition, etc., these tablets will render aid to a recovery. The Antikamnia puts the nervous system at rest; the Salol renders the intestinal canal antiseptic, thereby removing one cause of the disordered digestion, and placing the parts in better condition for the absorption of the digested food; while the Quinine acts as a tonic, "increasing the number of the red blood corpuscles." These tablets, combined with a generous diet, will often restore the depleted system to a full degree of health. As before stated, each tablet contains 2 gr. Antikamnia, 2 gr. Sulph. Quinine, and 1 gr. Salol, and should be specified "Antikamnia, Quinine and Salol Tablets."



TREATMENT OF AFFECTIONS OF THE RESPIRATORY TRACT.

IT has often occurred that a remedy has obtained a great reputation for the treatment of certain affections long before any good reason could be given to account for its action. This was notably the case with Quinine. For many years Quinine was employed empirically, no one knowing why it had such marked power over the condition known as malaria. But when it was discovered that malaria was due to the presence of a germ, and that Quinine acted as an active poison to this germ, then the clinical facts were explained in a truly scientific manner.

That Codeine had an especial effect in cases of nervous coughs, and that it was capable of controlling excessive coughing in various lung affections, was noted before its true physiological action was understood. Later it was clear that its power as a nervous quietant was due, as Bartholow says, to its special action on the pneumogastric nerve.

The coal-tar products were found to have great power as analgesics and antipyretics long before experiments in the therapeutical laboratory had been conducted to show their exact action. As a result of this laboratory work we know now that some products of the coal-tar series are safe, while others are very dangerous.

Antikamnia has stood the test of thorough experimental work, both in the laboratory and in actual practice; and is now generally accepted as the safest and surest of the coal-tar products.

Codeine stands apart from the rest of its group, in that it does not arrest secretion in the respiratory and intestinal tract. In marked contrast is it in this respect to morphine. Morphine dries the mucous membrane of the respiratory tract to such a degree that the condition is often made worse by its use; while its effect on the intestinal tract is to produce constipation. There are none of these disagreeable effects attending the use of Codeine.

COUGHS—LARYNGITIS—BRONCHITIS.—In these affections Antikamnia is indicated for two reasons: First, because of its absolute power over pain; at once removing this element of distress and placing

PLATE IV.



REDUCTION OF DISLOCATION OF HUMERUS.



PETIT'S MACHINE.

DESCRIPTION OF PLATE IV.

Petit's instrument for reduction of a dislocation of the humerus was composed of two upright pieces bent at the point the instrument came into contact with the axillary space, one prong lying on the chest, the other on the back. It was held in position by a band passing around the neck. The arm was attached at one end of a heavy cord, the other end being wound about the drum of the windlass. The patient, usually in an erect position, bore the weight of the body upon the "crutch." an assistant at the same time winding up the cord about the windlass.

As the cord became tighter, the head of the bone was brought into position. This method was, however, according to Heister, applicable only in such cases where the "luxation was upward or backward." In these dislocations the foot of the surgeon was often placed in the axilla, and by grasping the arm at the wrist, by extension and rotation the head of the bone dropped into its proper place.

ing the whole system in the best possible condition for a speedy recovery. And, second, because of its power to control inflammatory processes, lowering the fever by its peculiar action on the nervous system. Codeine is strongly indicated because of its power as a nervous quietant, often quickly and completely controlling the cough.

In nervous coughs, irritation of the throat, laryngitis, bronchitis, and phthisis, where the cough is altogether out of proportion to the amount of expectoration, these tablets will give prompt satisfaction. In fact, in cases of nervous coughs, irritable throat, so commonly attendant upon influenza and la grippe, as also sub-acute laryngitis, and slight bronchitis this combination alone will often so control the cough that the disease rapidly subsides. This is not strange when we remember that nothing could keep up this irritation more than constant coughing. In the more severe cases of bronchitis and in phthisis the patient is not only made more comfortable, but the disease itself is brought more directly under control by checking the excessive coughing, relieving the pain, and bringing the temperature down to the normal standard.

PERTUSSIS AND ASTHMA.—In whooping-cough and asthma we have the spasmodic condition which calls for precisely this combination. That these remedies will cure all cases of whooping-cough and cut short all attacks of asthma is not claimed; but there is an abundance of clinical evidence to the effect that the spasmodic element in pertussis is often relieved and the whole course of the disease brought under control by the administration of this combination; while a number of cases of asthma have been reported where acute attacks have been cut short as promptly as with a dose of morphine.

TAKING COLD.

There is another large class of affections for which this combination is suitable and which cannot be called by any particular name. We refer to all those cases where there is pain, restlessness, inability to sleep, feverishness, constricted feeling in the chest, etc., a condition which is associated with "taking cold," "neuralgic pains," and "cold fevers."

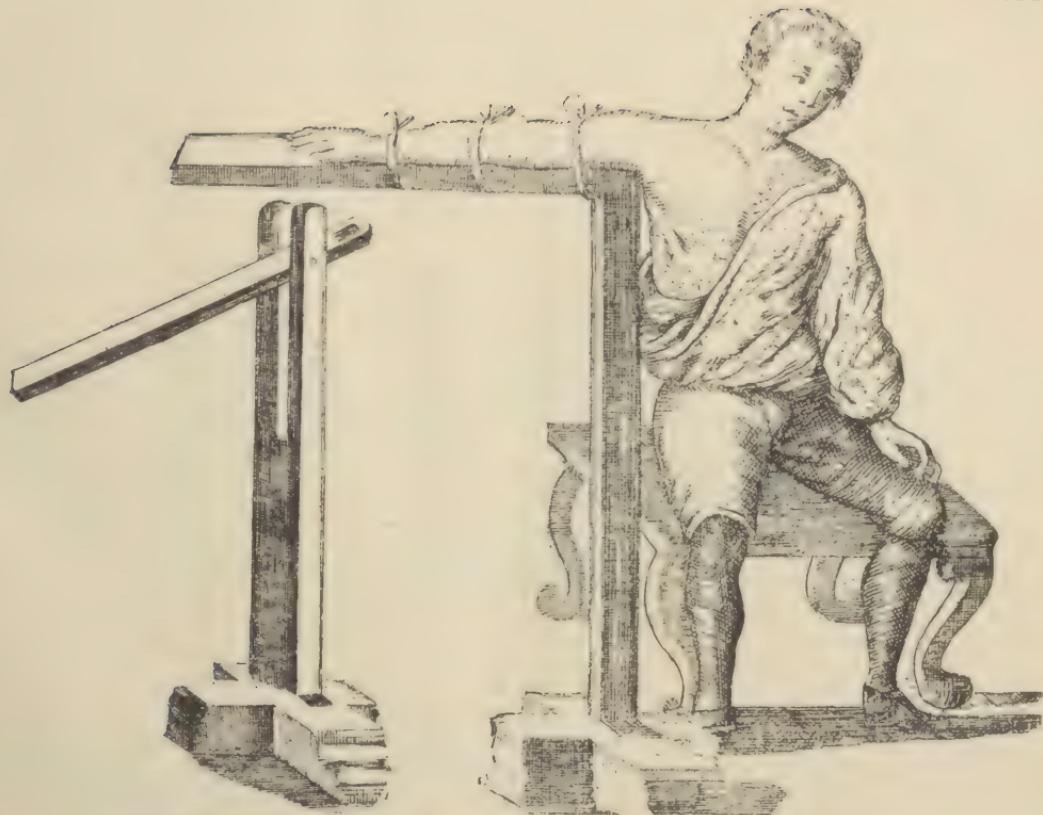
LARYNGEAL COUGHS.

Especial attention is called to the affection known as "laryngeal cough," which so frequently remains after an attack of la grippe, and which has heretofore been found so stubborn to yield to treatment. There is an irritation of the larynx, huskiness, and a dry and wheezing cough, usually worse at night. The prolonged and intense paroxysms of coughing are controlled by these tablets, and, with the cessation of the coughing, the laryngeal irritation subsides.

Antikamnia and Codeine are put up in tablet form, each tablet containing four and three-quarter grains Antikamnia and one-fourth grain Codeine. In prescribing specify "Antikamnia and Codeine Tablets." They are prepared only by the Antikamnia Chemical Company, St. Louis, Mo.



PLATE V.



REDUCTION OF DISLOCATION OF
HUMERUS—HIPPOCRATES.

INSTRUMENT IN POSITION.

DESCRIPTION OF PLATE V.

The oldest method for reducing a dislocation of the humerus was that of Hippocrates, which consisted of an upright of wood and another at right angles, which acted as a lever, the fulcrum being at the top of the upright support. The patient was seated beside the "instrument" and the arm placed in the extension piece, to which it was held firm by three bands. The lever was then pressed down, the head of the bone forced into position, and the reduction thus accomplished. The great danger always accompanying this method was the liability to injury to which the important structures in the axilla were subjected.

In the reduction of dislocations of the humerus, however, many different means were used ; placing the patient over beams, doors, and on ladders, and pulling the arm till it was forced into position.

MALARIA, MENTAL EXHAUSTION, CHOREA, DYSPEPSIA, PERTUSSIS.

WHEN two such well-known drugs as Antikamnia and Quinine are offered to the profession it hardly seems necessary to indicate the especial class of affections which call for their use. Antikamnia may now unquestionably be called a perfect substitute for morphine, for internal administration. It has complete control over pain, while it is free from the undesirable after-effects of the alkaloid of opium. But Antikamnia not only possesses the good qualities of morphine without the bad, but it also has the properties peculiar to the coal-tar series.

MALARIAL CONDITIONS.

In cases of malarial fever this combination should be given as a prophylactic and cure. For all malarial conditions Quinine is the best remedy we have. But associated with this condition there is always more or less pain, which often renders the life of the individual uncomfortable, if not positively miserable. Antikamnia will remove these unpleasant symptoms and place the system in the best condition for the Quinine to do its work. There are a number of ailments, not closely defined, which are due to the presence of the malarial poison. All such conditions are greatly benefited by the use of this combination. In headache (hemicrania), in the neuralgias occurring in anaemic patients who have malarial cachexia, and in a large number of affections more or less dependent upon this cachectic condition, the regular administration of these tablets will produce the most happy results.

LA GRIPPE.

Probably no other combination can suggest itself which is so clearly indicated in la grippe. We have here a group of symptoms which eminently call for the antipyretic and analgesic properties of the Antikamnia; while the Quinine acts as a tonic to the heart which is suffering from the

depression that forms such a marked feature of this affection. Under the use of this tablet the physician can confidently expect to control the pain, reduce the fever, quiet the cough, and remove the extreme depression.

AS AN ANTIPYRETIC.

As an antipyretic this combination at once recommends itself. The Quinine aids the Antikamnia and, at the same time, overcomes any depressing effect which this coal-tar product might have on a weakened heart. It is a combination also indicated in the pyrexia of typhoid fever, lowering the temperature and, at the same time, acting as a tonic.

MENTAL EXHAUSTION.

The mental exhaustion so often seen in brain-workers is greatly relieved by these tablets. Much benefit is derived from their use in cases of nervous depression, or neurasthenia. The Quinine acts as a tonic, preventing further exhaustion; while the Antikamnia puts the nervous system at rest.

CHOREA.

From the fact that Wood urges the use of Quinine as a stimulant to inhibition, and from the well-known therapeutical effects of the Antikamnia, it would appear that this combination is strongly indicated in this disease. The few clinical cases reported already confirm this suggestion.

SUMMER CATARRH: BRONCHITIS.

For summer catarrh, acute colds, etc., this tablet has already been extensively used. In chronic bronchitis, Quinine is generally regarded by the profession as the most useful tonic, especially in that condition associated with profuse expectoration. Combined with Antikamnia it fulfils all the more marked indications.

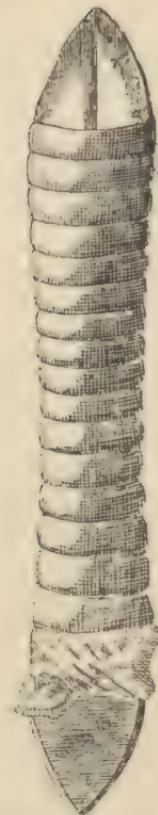
PLATE VI.



CALCULI.

LITHOTOMY.

LITHOTOMY KNIFE.



DESCRIPTION OF PLATE VI.

In the perineal operation for lithotomy of the bladder, the stone, being located, was pressed forward to the left side of the perineum and thus held by the finger. The incision was made down to the stone through the skin, fascias, neck of bladder, and turned out. Compresses of lint and a T bandage were then applied.

The first successful operation of supra-pubic lithotomy was performed in France, by Franco, in 1560. The subject was a child two years old, and the stone so large that it could not have been removed by the perineal operation.

The stone was located and pushed toward the pubes. An incision was made above the pubic bone on a line with and at about the end of the linea alba, through the tissue and into the bladder. The incision was kept open by retractors, and the stone removed. The edges of the wound were brought together and sutured, a balsam applied locally, and bandaged. The operation was again successfully performed by Greenfield in 1710, by Douglas in 1720, recommending itself to them as better than the perineal, as by it the dangers of wounding the sphincters, the seminal ducts, and urethra were avoided.

DYSPEPSIA: GASTRIC CATARRH.

In atonic dyspepsia, we have in Quinine a stimulant to the digestive functions; while the Antikamnia controls the feeling of restlessness, if not of actual pain, which accompanies this affection. In gastric catarrh, Quinine relieves the morbid condition upon which the increased amount of mucus depends and stimulates the digestive glands to a more healthy action. The Antikamnia absolutely controls the pain and thus relieves the mind of the patient who is already inclined to be despondent. This tablet is especially indicated in those cases of gastric catarrh which have resulted from an excessive use of alcoholic stimulants.

WHOOPING-COUGH.

In whooping-cough the researches of Baron show that the internal administration of Quinine is "a wise procedure," while the peculiar properties of the Antikamnia will accomplish much to relieve the distressing symptoms of the disease.

Antikamnia and Quinine are put up in tablet form, each tablet containing two and one-half grains of Antikamnia and two and one-half grains of Quinine. When prescribing specify "Antikamnia and Quinine Tablets"; they are prepared solely by the Antikamnia Chemical Company, St. Louis, Mo.



AFFECTIONS OF THE GASTRO-INTESTINAL TRACT.

MODERN biology teaches that each anatomical unit is an active laboratory. Here constant and most complex changes occur. This cell activity means cell waste. Thus it is that the body is constantly wasting away. This waste must be replaced with new material. The cells must be fed. A single thought in this line enforces the fact that healthful cellular activity depends largely upon the character of the food supply. The delicate adjustment of the law of supply and demand cannot be disturbed with impunity.

Thus it follows that improper food supply, including water and air, and improper hygienic surroundings result in such disturbances that a departure from a healthy standard is produced. Hygienic living may prevent a large part of this; yet no matter how carefully the laws of health may be carried out, we are still unable to fully prevent the introduction into the system of pathogenic germs.

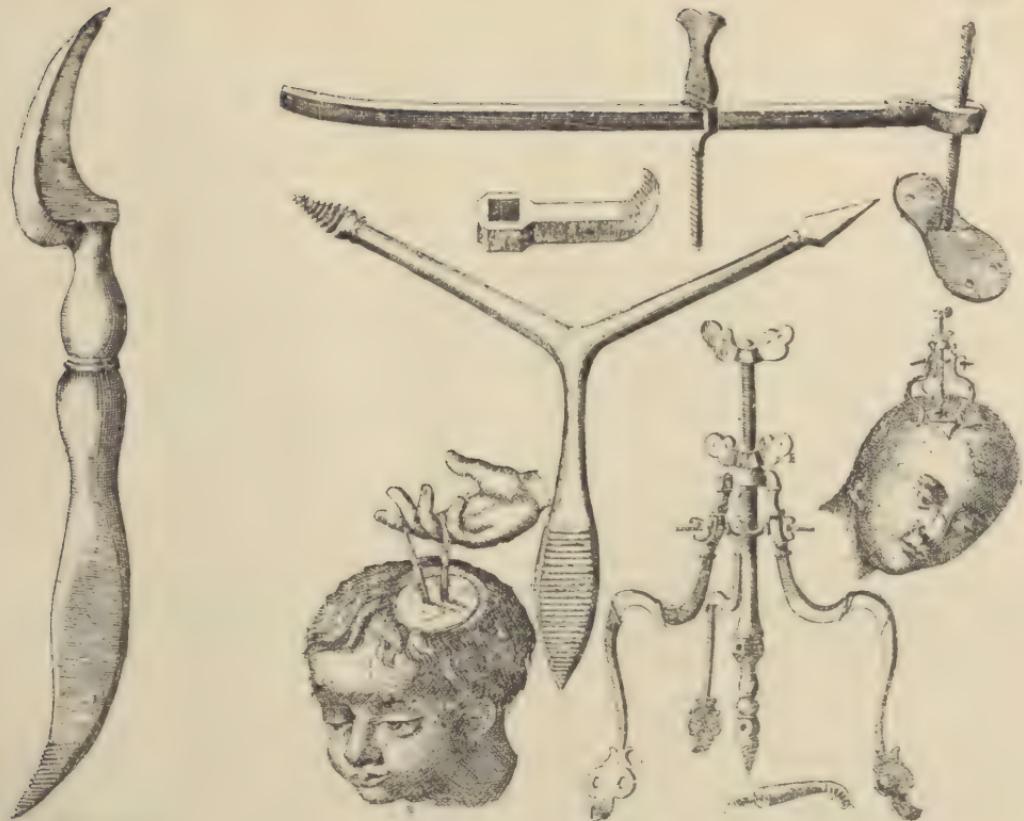
BODY RESISTANCE TO DISEASE.

It is true that so long as the tissues of the body are in a perfectly healthy condition they are capable of resisting the action of the various germs to a most astonishing degree. But it is also true that even a slight departure from health is sufficient to reduce this resisting power to a degree which allows these germs to grow and produce their deadly effects.

GERMS IN ALIMENTARY CANAL.

Let us apply these considerations to the alimentary canal. We cannot hope to destroy all germ life in the digestive tube. It has been said that "the digestive tube is the paradise of microbes." We find here physical and chemical conditions admirably adapted for the culture of micro-organisms. Large numbers of such organisms live habitually in the alimentary canal. It is only when

PLATE VII.



BONE ELEVATOR.

TREPHINING.

DESCRIPTION OF PLATE VII.

In fractures of the skull, when it was thought from the symptoms, unconsciousness, vomiting, etc., that a portion of bone or a clot of blood was pressing on the brain, the boring out of small pieces of bone, trephining, was resorted to, to give relief. In fractures, the button was removed as near the seat of injury as possible and the pieces of bone elevated or removed in a manner similar to that of the present time. Great stress was placed upon avoiding the sutures, especially the sagittal, on account of the close proximity of the dura mater. The plate illustrates the different steps in the removal of the bone. This having been accomplished and the extravasated blood in sight and difficult of removal, a snuff was given for inhalation, which, when sneezing followed, aided in forcing the blood out. The fractured portions of the bone were then either elevated or removed. The wound was thoroughly bathed in warm wine, a small round piece of cloth placed over the exposed brain substance, and the whole injury packed and covered with layers of lint. Bandages were put on, a redressing occurring every fourth day. It usually required about 60 days for the space to "fill in" and to complete recovery.

these become excessive or when some specific pathogenic germs are introduced that disease may result from them. The vast number of germs which are taken into the system with our food and drink give no trouble so long as the body resistance is at par. But, as has been said, a slight departure from health is often sufficient to produce a condition and reduced resistance which allow these minute organisms to seize upon the tissues.

RESULTS OF GERM ACTIVITY.

If the gastric juice becomes altered, and especially if it does not contain the proper amount of acid, or if there be some derangement in the secretory function of the liver, digestive troubles follow. As a result, we have fermentation, imperfect digestion, incomplete absorption, defective assimilation, and inanition. Other conditions may arise. The reduced resistance of the body favors the activity of specific germ life, and we have such diseases as typhoid fever, cholera, etc.

TREATMENT.

INTESTINAL ANTISEPTICS.

From what has been said, it follows that rational therapeutics places intestinal antiseptics among the first of all remedies in the treatment of gastro-intestinal affections and the diseases resulting therefrom.

PAIN MUST BE RELIEVED.

One important element, entering into all these cases, has not been considered. Pain, more or less acute, accompanies nearly all disturbances of the digestive tract. The pain itself is often sufficiently severe to check digestion, absorption, and assimilation. The body is in no condition to

recuperate when the nervous system is irritated or greatly disturbed with pain. Pain must be relieved. The system must be put at ease if its functions are to be normally carried out. To relieve with opium is only to lock up the secretions, check the functions of the kidneys and liver, and depress the nervous system. Opium arrests peristaltic action, thereby allowing the digestive tube to retain its mass of germ life with its poisonous products. Thus modern therapeutics teaches that the proper treatment for gastro-intestinal affections, with their resulting ailments, is two-fold: antiseptic, and anti-pain.

ANTIKAMNIA AND SALOL.

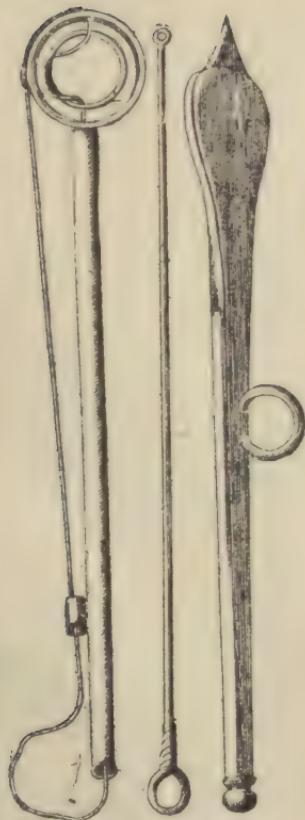
The *Materia Medica* gives at least one safe intestinal antiseptic. It is Salol. Professor Hare, in the last edition of his *Practical Therapeutics*, says that Salol "renders the intestinal canal antiseptic, and so removes the cause of the disorder, instead of locking the putrid material in the bowel, as does opium." He regards Salol as "one of the most valued drugs in the treatment of intestinal affections." The statements of Professor Hare are so well known, and have been so often verified, that further remarks upon them are unnecessary.

Have we a substitute for opium for the relief of pain? Here come in the modern coal-tar products, the first of which, for the relief of pain, stands Antikamnia. Therefore, we conclude that to remove the cause, to render the intestinal canal antiseptic, we have an invaluable remedy in Salol; while to remove accompanying pain, to quiet the nervous system, and to reduce any fever which may be present, we have a remedy equally efficacious in Antikamnia: *an ideal combination for the treatment of this large class of diseases.*

DYSPEPSIA: DUODENAL CATARRH: CATARRHAL JAUNDICE.

A number of special complaints will at once occur to the mind of every practitioner. First, probably, will be Fermentative Dyspepsia, and ailments accompanied with eructations of gas,

PLATE VIII.



FOR REMOVING
ELONGATED UVULA.



TRACHEOTOMY—IN GASTRIC
DISEASES.



LARYNGOTOMY.

DESCRIPTION OF PLATE VIII.

For performing tracheotomy, the instrument consisted of a trocar having a three-cornered pointed needle. This was forced through the tissues and into the trachea "two or three finger-breadths beneath Adam's apple;" the needle then being withdrawn, leaving the tube in place. The external portion of the tube was provided with a shield to which tape or string was attached, and tied around the neck, thus holding it firmly in position.

In the operation of laryngotomy, an incision was made through the tissues of the neck "two or three finger-breadths beneath Adam's apple, and the length of three finger-breadths to the sternum, and down to the trachea." Four or five rings were cut, the lips of the incision were separated with a retractor, and the foreign body removed with a pair of forceps. The wound was then cleansed, the edges of the incision brought together by sutures and plasters, a balsam applied and bandaged.

In the treatment of an elongated uvula, the instruments as shown were used. A thread was firmly tied around the uvula at the point it was thought advisable to remove it. The other instrument shown was used in diseases of the stomach, and served very much in the nature of a "swab."

flatus and pain. Duodenal Catarrh and Catarrhal Jaundice next come to mind. Professor Hare says that in these affections "Salol is of the greatest value." The pain and nervous irritability, so often occurring in these ailments a few hours after each meal, are entirely relieved by the Antikamnia.

DIARRHŒA.

In Diarrhœa this combination is precisely indicated. We do not care to lock up the putrid material in the bowel and have the poisonous germ-products absorbed, giving rise to fever and all the symptoms of absorption of poisonous material. Salol renders the intestinal canal antiseptic, destroying the germ; while Antikamnia relieves the pain and restores quiet to the nervous system. This condition is also true in Dysentery, in Cholera, and in Cholera Infantum.

In the diarrhœa of Phthisis we have to deal with an affection which can very generally be brought under control by this combination. The diarrhœa may be due to the tubercle bacilli which have gained entrance into the digestive tube, or to other germs. In either case the Salol will destroy this germ life; while the Antikamnia will give tranquillity to the nervous system, and, by its antifebrile action as a coal-tar product, will do much to bring the temperature down to the normal standard.

TYPHOID FEVER.

Typhoid Fever is another disease, the condition of which points exactly to a combination of these two drugs: one to render the intestine antiseptic, thus destroying as far as possible the cause of the disease, or at least preventing a further growth of the germs in the tube itself; while the other remedy tends to control the temperature by its action on the nerve-centres.

WASTING DISEASES: CHLOROSIS: ANÆMIA.

But there is another large class of diseases so closely dependent upon disturbances of the digestive tract that it is impossible to separate the two. They are related to each other as cause to effect. We refer especially to the wasting diseases of children, Chlorosis, Anæmia, General Debility, etc. These are diseases closely related to some disturbance of nutrition. No matter how generous the food supply, or how perfect the sanitary surroundings, if the food is not properly digested, absorbed, and assimilated, we must expect these ailments to follow.

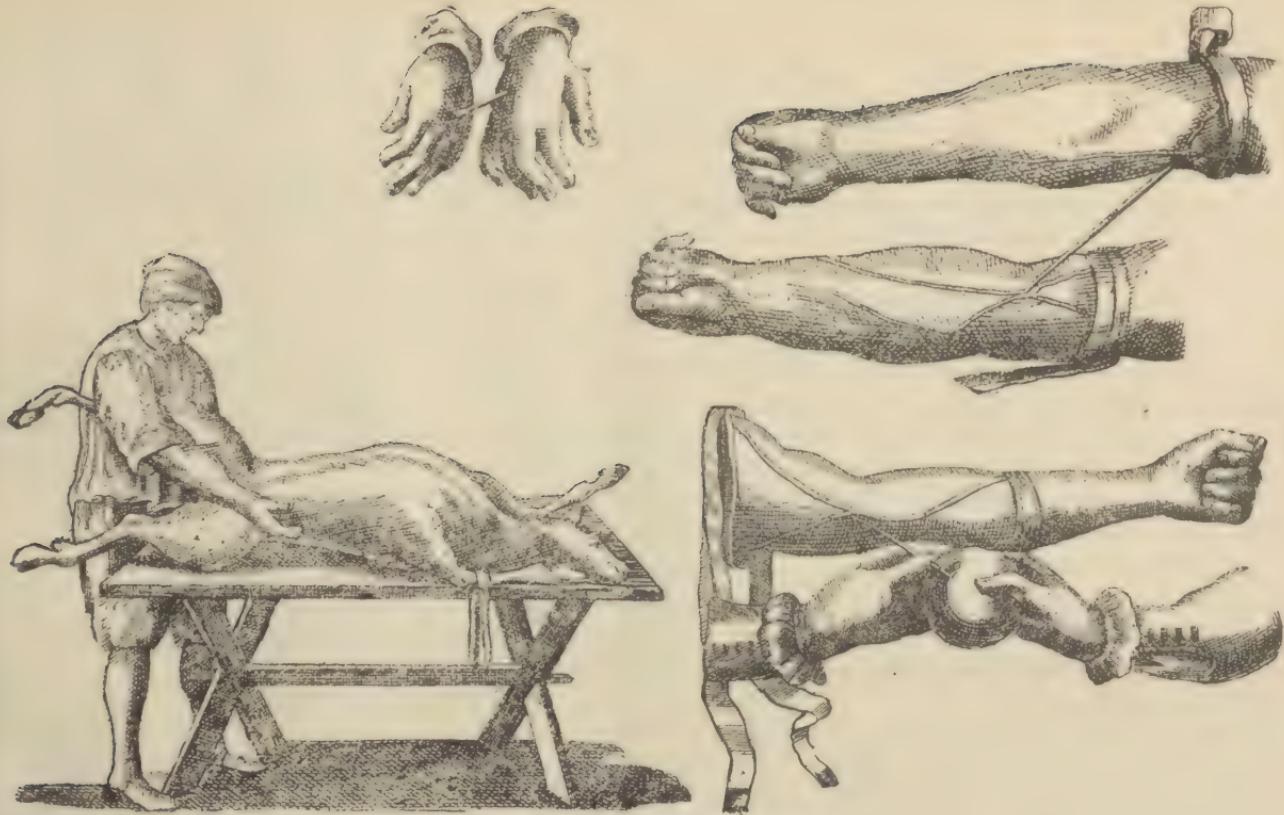
Disturbances of digestion cause a long train of symptoms which are often only evident by loss of appetite, loss of weight, and general failure of all the powers. This class of diseases, so obstinate to treat, and so often misunderstood, is equally as often made clear by a careful search for the cause. Not always, but very often, do we find this cause to be due to digestive disturbances. The difficulty is often remedied by rendering the digestive tract antiseptic, by placing the nervous system at rest, together with a generous supply of fresh air and nutritious diet.

In conclusion, therefore, we believe we have in Salol and Antikamnia a combination which is indicated in the very large class of "intestinal disorders." It is a combination also indicated in even the larger class of ailments which come as a result of those first mentioned.

These two drugs are put up in tablet form, called "Antikamnia and Salol Tablets," each tablet containing two and one-half grains of Antikamnia and two and one-half grains of Salol, and they are prepared only by the Antikamnia Chemical Company, St. Louis, Mo.



PLATE IX.



TRANSFUSION AND INFUSION.

DESCRIPTION OF PLATE IX.

In transfusion of blood, the perfected operation of Lower, about 1670, consisted in conveying the blood directly from the artery of a healthy person to a vein of the patient, allowing gravitation to be the only propelling medium. The mediate method, or injection of the fluid into the vein, was first mentioned by Major, in 1664, before it became known in Germany. The blood of sheep and calves was transfused, when there was profuse hemorrhage. From 1660 to 1680 much was thought of transfusion, but met with little success, as many became worse after resorting to it: others melancholic; others still insane, until in France the Government suppressed it. Infusion, or the mediate method, was used in cases, especially of old people when medicines could not be taken per orem (the medicine being injected instead), to rejuvenate them, and to change bad tempers to good.

Transfusion was effected by opening the artery of the healthy person and the vein of the patient, inserting a tube of bone, silver, or brass, allowing the blood to flow from the healthy one into the patient toward the heart. In case a sheep or calf was brought into use, the artery of the neck or leg was opened, the animal being firmly bound to a table.

HEADACHES OF EXTRA-CRANIAL ORIGIN.*

BY FRANK WOODBURY, A.M., M.D., PHILADELPHIA, PA.

HEADACHE, on the one hand, may arise from some disorder of the brain or its membranes, indicating disease of ganglia, blood-vessels, nerves, and other anatomical elements enclosed within the cranial cavity; on the other hand, it may attend various morbid conditions existing outside the cranium, and possibly in remote parts of the body. The latter class of cases may be clinically grouped as "Extra-Cranial Headaches." Of this group, the following case will afford a convenient and appropriate illustration:

A. H., a travelling salesman, single, thirty-six years of age, of robust appearance and generally enjoying good health, came to me complaining of constant headache of a dull, heavy character. He could not apply himself to business, and was morose and irritable. His friends told me that from his usual cheerful disposition he had changed and become moody and unsociable, and that he sat most of the time with his head between his hands and his elbows resting on his knees. His business associates, in truth, began to think that his mind was becoming affected. He used tobacco and alcohol, though, he claimed, not to excess. He had become infected with syphilis some three years before. It must be added that he could not sleep at night on account of his headache, and his appearance indicated loss of rest and suffering.

Upon examination there was found no abnormality of heart or lung. Appetite was fair, digestion good, no constipation. The urine was free from albumin and sugar. He had some diplopia from recent paralysis of the external rectus of the left eye, but examination of the eyes with the ophthalmoscope did not reveal anything of importance. The slight ocular paralysis was attributed to a syphilitic deposit along the sheath of the abducens nerve. The patient was accordingly put on the mixed treatment of bichloride of mercury and potassium iodide, the latter being gradually

* Read before the Mississippi Valley Medical Association, at Hot Springs, Ark., November, 1894.

increased to two drachms daily. Appropriate glasses (prism) were ordered, which enabled him to read with more comfort, but the headache and sleeplessness continued. Various hypnotics were tried without much effect, the patient meanwhile becoming despondent and talking about suicide. One day when he came in, having some five-grain powders of Antikamnia, which had been sent by mail as a sample, and which I had used already in my own family and for several patients with very prompt effects, I decided to give him four powders, with the direction to take two on retiring at night and two more an hour later, if awake. He reported the next morning that he had secured the first good night's rest that he had had for several weeks, and asked for more of the powders, which I gave him. I also made an examination of his nose and pharynx, and found tumefaction and inflammation of the lower turbinate body on the left side, and, upon using a probe, I detected dead bone. Soon afterward I removed the inferior turbinated bone, which was completely necrosed. Since that time Mr. H. has had other manifestations of syphilis, and has been kept under observation, but he has had no return of headache. His eye symptom has also disappeared under treatment.

In this case the lesion causing the headache was situated in the upper air-passages, and accompanied specific inflammation of the turbinated bone which was sufficient to destroy its vitality. The prompt treatment limited and favorably influenced the course of the disease; but in the meantime the patient's health was breaking down under the pain and loss of sleep. The latter symptoms were finally relieved by Antikamnia better than morphine, conium, bromides, chloral, and other remedies that had been previously given. The value of the mixed treatment was beautifully demonstrated by the effect upon the motor paralysis of the eye, which entirely disappeared within two months after the treatment had been instituted.

While in this case there is little doubt that there was also cerebral syphilis, the course of the disorder pointed to the co-existing nasal affection as the immediate cause of the headache. This view is confirmed by the case of another patient with syphilitic history and paralysis of the same

PLATE X.



MOMA.

TREATMENT IN APOPLEXY.

TREATMENT OF SPINAL
CURVATURE.

DESCRIPTION OF PLATE X.

While there were two forms of cauterization used, the actual cautery was in the greater majority of cases preferable to the potential or corrosive.

The thoroughly equipped operator had in his possession a great variety of different shaped cautery irons; the shape to be used depending entirely upon the parts to which they were to be applied. The moxa was made of flax or lint rolled into the form of a cone, and administered most frequently in neuralgia and rheumatic affections at the seat of the pain. Placed on the affected part, it was lighted, and as it burned down, the heat and cauterization increased. The treatment was repeated a number of times until the patient admitted the disappearance of the pain.

In spinal curvature, wry-neck, etc., the patient was placed in the swing as shown, the collar surrounding the neck; a series of pulleys were attached to the ring above, and to the ceiling. The body was then drawn up from the floor, and by extension the deformity reduced. Held in this position for two or three hours and then placed in a jacket of wood or steel, a great many cases in time recovered so the deformity was scarcely perceptible.

ocular muscle, which went on to complete recovery under treatment, but in which there was no headache whatever.

Another well-recognized cause of extra-cranial headache is hypertrophic adenoid growths in the vault of the pharynx. This is so common that when a child suffers from frequent headaches, we do not at once conclude that the patient is applying himself too closely to his studies and advise his removal from school, until, at least, we have excluded adenoids by rhinoscopic or digital examination of the pharyngeal vault. Catarrhal and other inflammations of the tonsils are often attended by headache. In diphtheria it is a prominent and early symptom, while yet a local disease.

Caries of the teeth are such a commonly accepted cause of trifacial neuralgia that they may be acknowledged as causes of other head-pains. Cases are occasionally encountered in which the obstructed eruption of a wisdom tooth may be the explanation of otherwise unaccountable headaches.

Disorders of refraction and the condition of so-called "eye-strain" are well-known causes of headache and other nervous disorders, such as chorea. Other morbid conditions of the eye, such as glaucoma, iritis, etc., may be attended by pains extending through the head. Foreign bodies in the nose or ears, middle-ear disease, inflammation of mastoid cells, etc., likewise lead to more or less headache. Neuralgic and rheumatic affections of the pericranium, or scalp, are also attended by extra-cranial headache. The mechanism of the headache of the vertex accompanying uterine disorder is not very clear, but that it is directly connected with the condition of the pelvic organs is demonstrated by the fact that mechanical support and local treatment are often followed by immediate relief. Analogous to these are the headaches of menstruation, which have unfortunately led so many women into forming the morphine habit. That we have in Antikamnia an efficient substitute for opiates is a source of gratification and satisfaction to every one who takes an interest in diminishing the consumption of morphine in medical practice and outside of it.

In brow-ague, as it is called, the combination of Antikamnia with quinine is more appropriate. Antipyrine has also considerable power over pain, and has been administered hypodermi-

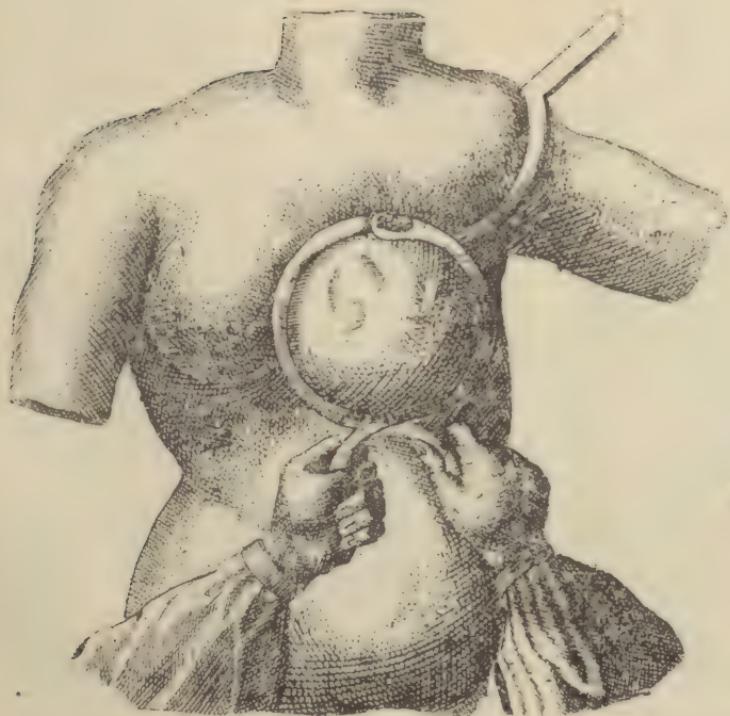
cally. In some cases, however, it is followed by a measles rash, which patients object to, and in others it produces depression and collapse which may be fatal; numerous cases of this character have been published illustrating the untoward effects of antipyrine, which the American preparation is free from. Personally, I am free to say that I feel under obligation to the manufacturers who have supplied the profession with a remedy which is largely taking the place of that insidious and danger-agent of living death, or endless sleep, morphine.

The object of these brief remarks is to call attention to the fact that we have in Antikamnia a prompt method of relieving the symptom, headache; but at the same time something more than palliative treatment is required, in order not to bring discredit upon the remedy by asking too much from it. I would also suggest that headaches have very diverse causes, the site of which may be in the upper air-passages as well as in the more remote pelvic organs, a large number of headaches in their final analysis being found to be of extra-cranial origin.

* * * * *

In the discussion following the reading of the paper, Dr. Thos. Hunt Stucky, of Louisville, said: The paper just read is to me one of unusual interest and importance. When we take into consideration the many causes of headache, and look back upon the treatment for the past twenty years for the condition by opium or its alkaloids, chloral, the bromides, etc., and remember their tardiness of producing relief, the danger of having our patients becoming drug-habitués, 'tis indeed, a fact that Antikamnia has proven a Godsend to the people, as well as the profession. One fact is evident, and that is that Antikamnia has almost entirely displaced opium, its compounds and derivatives. If it has done this and does nothing more, its mission is a great one and its usefulness thoroughly established. "It does not depress the heart's action; it does relieve pain. An extended use from its first appearance on the market has served to increase my confidence in the great value of Antikamnia."

PLATE XI.



AMPUTATION OF MAMMÆ.

DESCRIPTION OF PLATE XI.

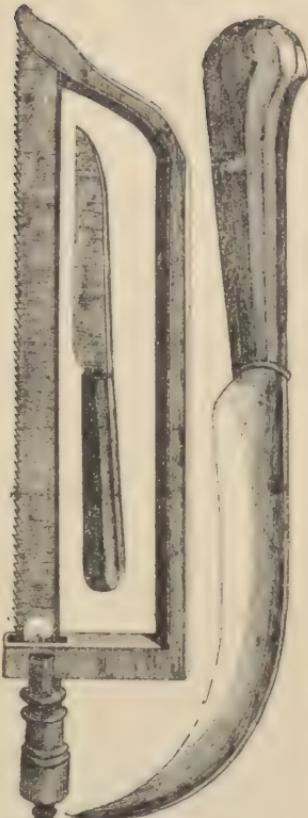
The treatment of cancers involving the breasts of females was heroic. If the growth was small, it was removed in the same way as is done to-day. A crucial incision was made down to it, and the cancer dissected out.

Where the entire mammae was involved, complete extirpation was the only method of relief. The breast was caught up by an assistant with either one or both hands, raised from the chest wall, while the surgeon removed it. Another method was as shown in the illustration. The breast was held firmly by a clamp of metal over the shoulder, attached by a thumbscrew to the two semicircular ones surrounding the breast. The latter arms of the clamp were forced together tightly, and locked, serving at the same time as a guide for the incision. A sharp knife shaped like the razor of to-day was used in the operation. The breast removed, the vessels were allowed to bleed from two to four ounces. Lint, saturated in hot beer in which had been dissolved a piece of butter, was applied to the bleeding surface, compresses put on and the part bandaged.

PLATE XII.



AMPUTATION OF FOREARM.



INSTRUMENTS USED.

DESCRIPTION OF PLATE XII.

In the amputation of an arm, the patient was held by one assistant placing his arms around the body at the waist, another grasping the arm above, another still below the line of amputation, while the surgeon stood between the feet of the patient; another assistant then encircled the arm with his hands, drawing the tissues back tight. The incision was made around the entire arm through the skin, superficial and deep fascias and muscles to the bone, a T retractor applied, and the bone sawed through. The muscles were then relaxed, the tourniquet slightly loosened, and the blood-vessels caught. To control the hemorrhage, ligation, torsion, and the actual cautery were used.

law - know

group (verb)

"An attainment of anti -
knowing"

